

wherein the permanent magnet is made so as to have both of a convex part to an inner diameter side and a convex part to an outer diameter side in a cross section taken vertically to an axis;

B1  
(cont)  
wherein a focus of magnetic orientation of each magnetic pole of the permanent magnet is located outside of the rotor,

wherein the rotor is formed by a rotor core assembly made by multilayering multiple pieces of core laminations, each having plural containing holes for inserting the permanent magnets and the permanent magnets are inserted into the containing holes for inserting the permanent magnets; and

wherein a thickness of the rotor core, which separates the permanent magnet and the gap, is made within  $\pm 30\%$  of a thickness of the rotor core lamination.

4. (Amended) The permanent-magnet motor of claim 1,

B2  
wherein when a radius of an arc of an outer diameter side of the containing hole is  $R$ , and a radius of an arc of an outer diameter side of the permanent magnet inserted into the containing hole is  $r$ , it is set as  $R < r$ .

8. (Amended) A permanent-magnet motor comprising:

a stator having stator winding of plural phases; and

B3  
a rotor facing to inside of the stator across a gap part, and having a rotor core and a permanent magnet provided to the rotor core,

wherein the permanent magnet is made so as to have both of a convex part to an inner diameter side and a convex part to an outer diameter side in a cross section taken vertically to an axis,

wherein the rotor is formed by a rotor core assembly made by multilayering multiple pieces of core laminations, each having plural containing holes for inserting the permanent

magnets and the permanent magnets are inserted into the containing holes for inserting the permanent magnets; and

wherein a thickness of the rotor core, which separates the permanent magnet and the gap, is made within  $\pm 30\%$  of a thickness of the rotor core lamination.

BB  
(cont)  
9. (Amended) A method for manufacturing a permanent-magnet motor including a stator having stator winding of plural phases and a rotor facing to inside of the stator across a gap part, and having a rotor core and a permanent magnet provided to the rotor core, the method comprising:

making the permanent magnet so as to have both a convex part to an inner diameter side and a convex part to an outer diameter side in a cross section taken vertically to an axis

forming a rotor core assembly by multilayering multiple rotor core laminations, each having plural containing holes for inserting the permanent magnets; and

inserting the permanent magnets into the plural containing holes for inserting the permanent magnets,

wherein a thickness of the rotor core, which separates the permanent magnet and the gap part, is made within  $\pm 30\%$  of a thickness of the multiple rotor core laminations.

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#### REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested. Claims 1 and 3-9 are presently active in this case, Claims 2 and 10 canceled and Claims 1, 4, 8, and 9 amended by way of the present amendment.

In the outstanding Official Action the drawings were objected to; Claim 8 was rejected under 35 U.S.C. § 102(b) as being anticipated by JP 11285184 to Yoshifumi; and